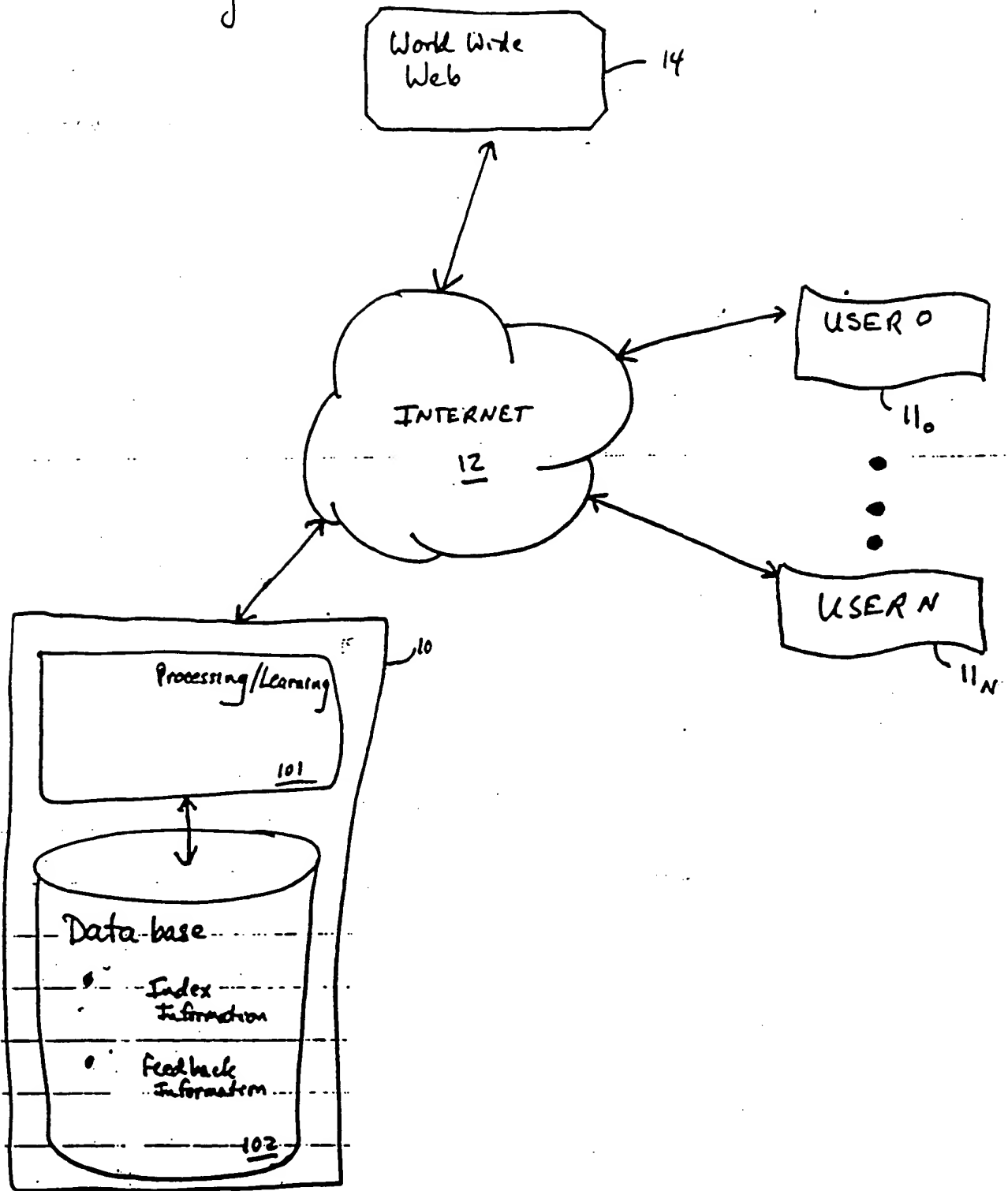
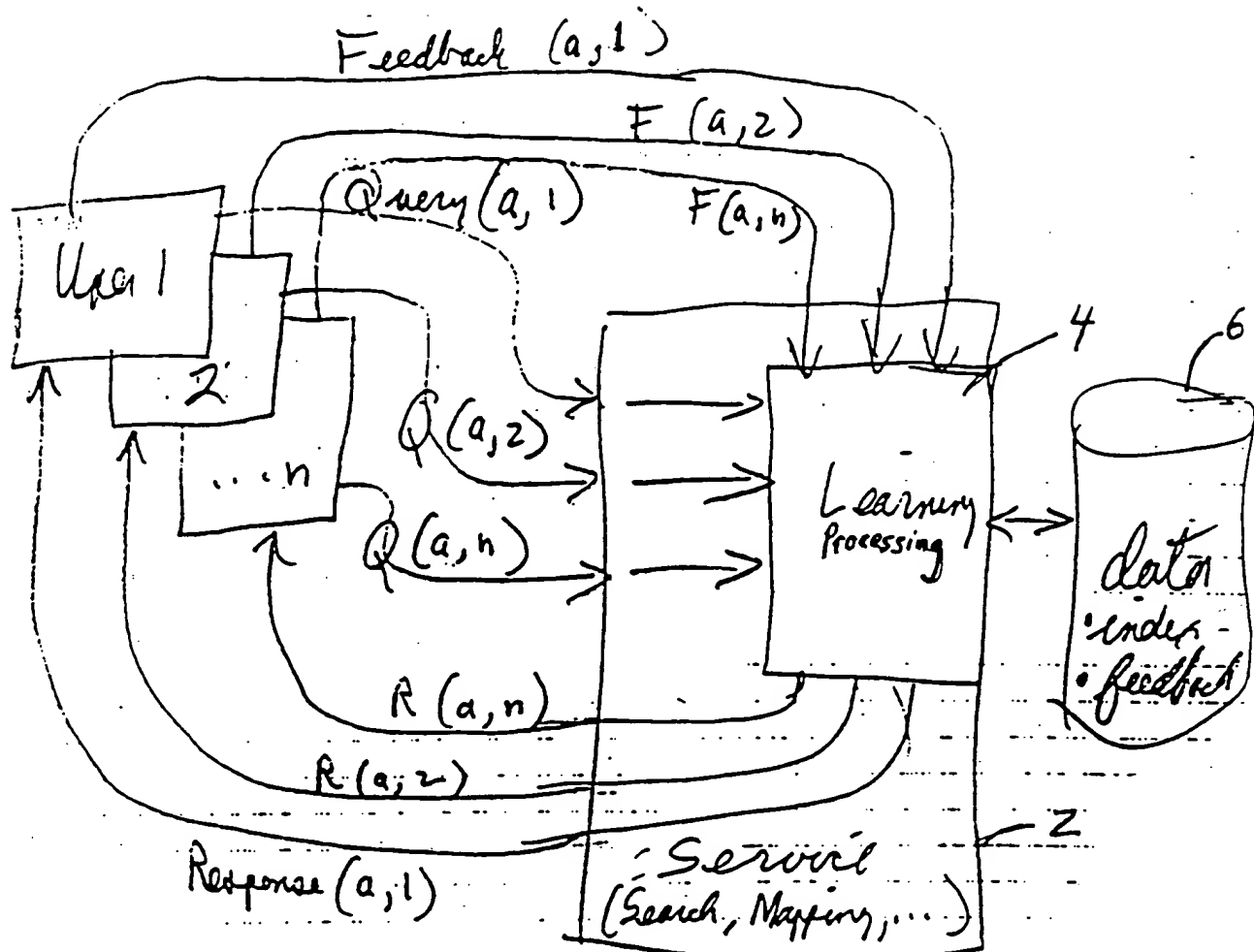


Fig. 1A

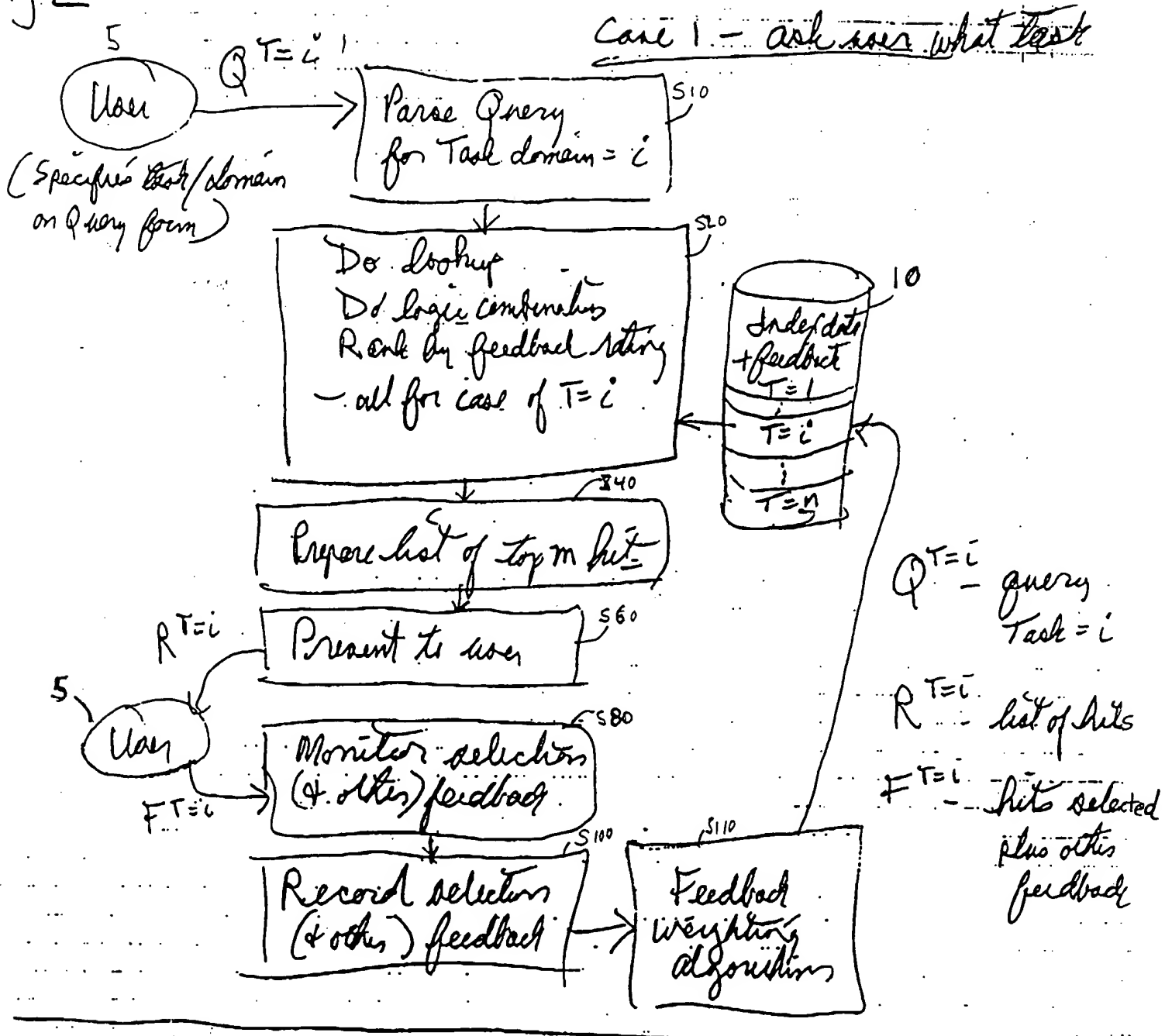


Multi-user feedback



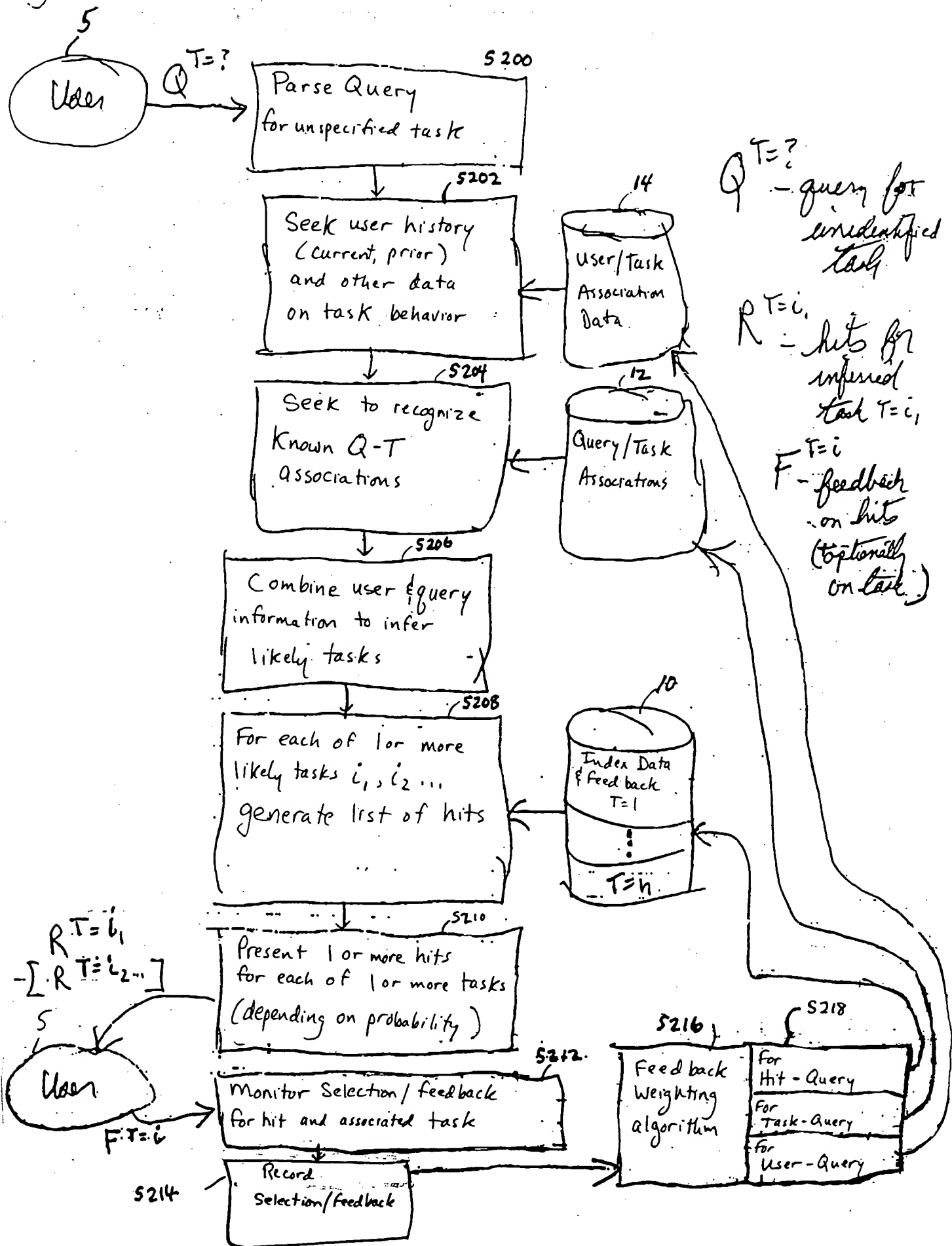
$\left. \begin{matrix} Q \\ R \\ F \end{matrix} \right\} \begin{matrix} (a, n) \\ \downarrow \\ \text{(Query or request item, user case/instance)} \end{matrix} \right\} \begin{matrix} = \text{Query item} \\ = \text{Query response} \\ = \text{Feedback results} \end{matrix}$

Fig 2



- * use sentence info & vocabulary to define tasks
- match task specifications in terms of semantics/vocabulary
- * segment data by task as feedback is obtained
- start with all data at low probability setting, then adjust as feedback is obtained

Fig. 3



Index sample - Task/Domain (Fig 4)

Task $T =$	Q 's $Q(a)$	Poss Targets	Raw score	Exp. and	Probability (Task/Domain)
1	Single domain $Q(a) 0$	T_1 T_2 \vdots	S_{a1T1}	E_{a1T1}	P_{a1T1}
1	$Q(b) 0$				
1	Compound $Q(c) 1$				
2	Single $Q(a) 0$				
2	$Q(d) 0$				
	Compound $Q(e) 1$				
...					
Unknown tasks \leftarrow Known tasks	\times Single $Q(a) 0$	T_1 T_2 \vdots	S_{axT1}	E_{axT1}	P_{axT1}
	\times $Q(f) 0$				
	\times Compound $Q(g) 1$				
	\times				
\times_1	$Q(a) 0$	T_1 T_2 \vdots	S_{ax_1T1}	E_{ax_1T1}	P_{ax_1T1}
\times_1	$Q(b) 0$				
\times_1	$Q(c) 1$				
\times_2	$Q(a) 0$				

FIG. 5 A

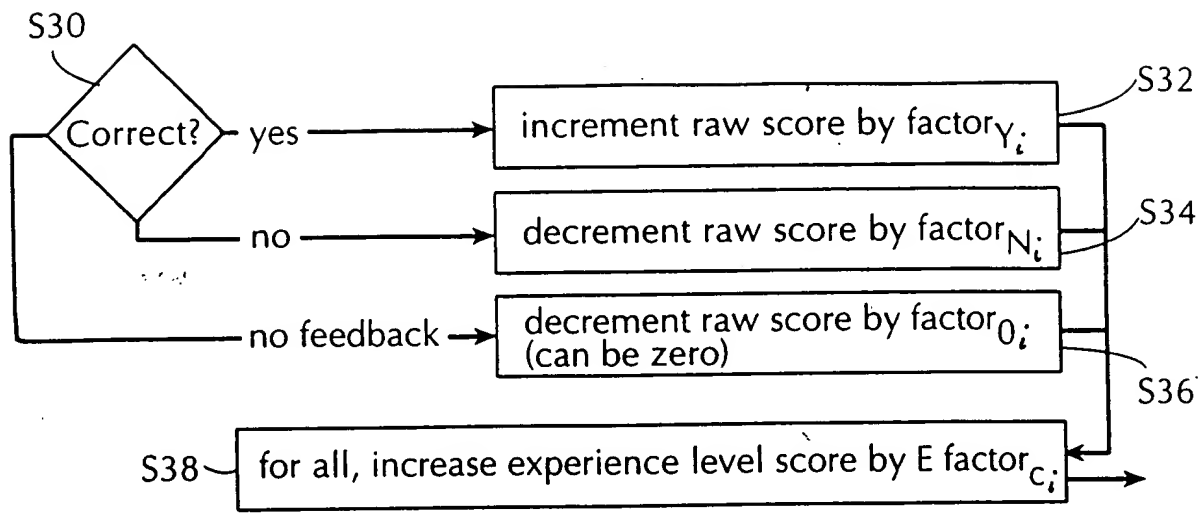


FIG. 5 B

